

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

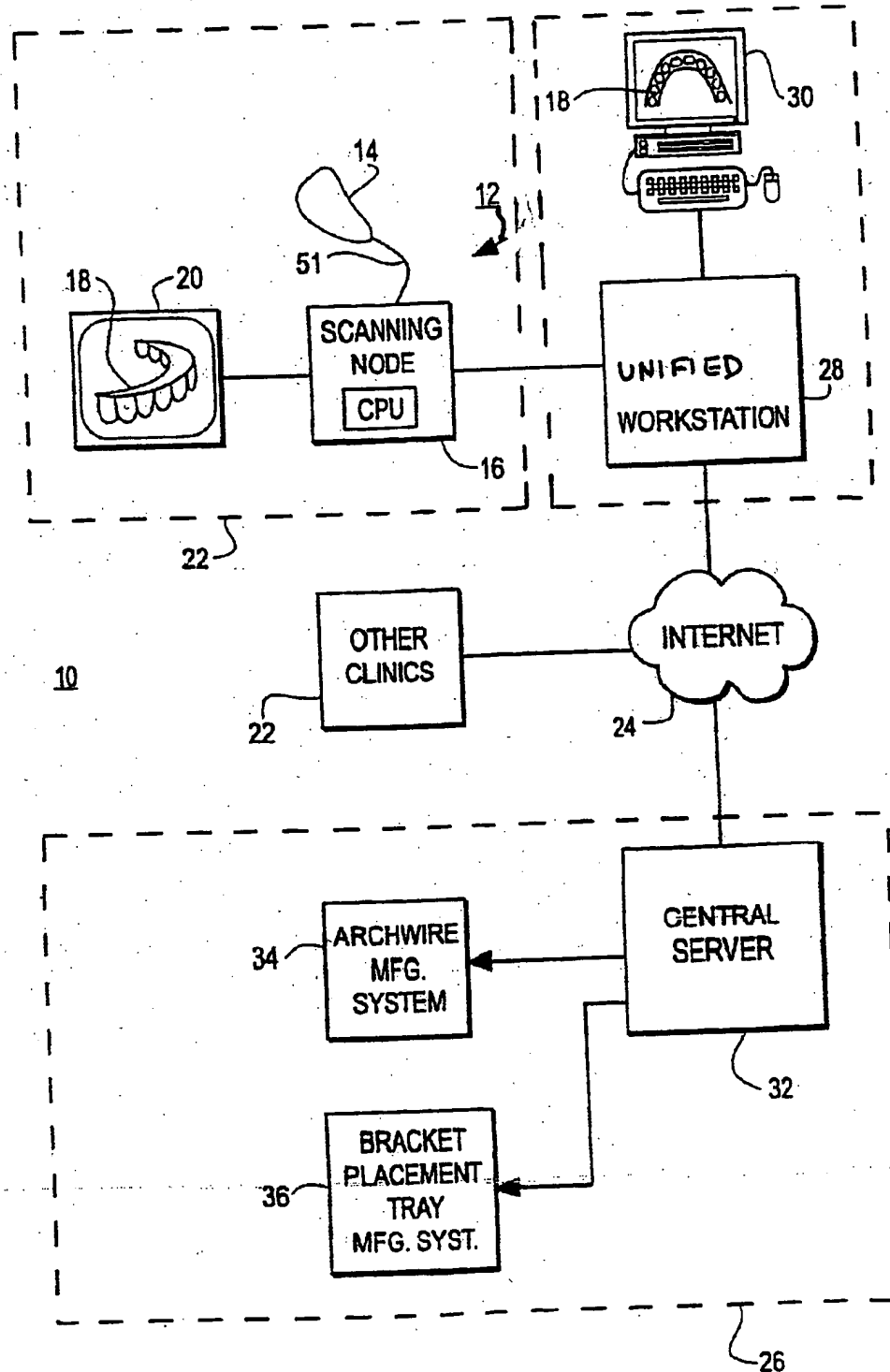
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

FIG. 1

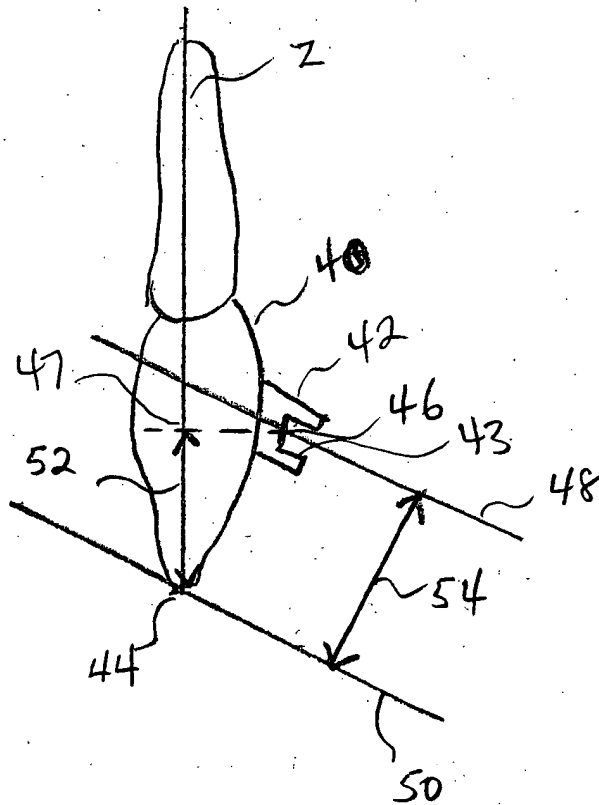


Fig. 2

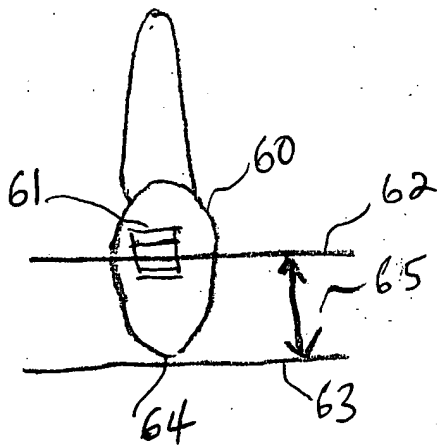


Fig. 2(a)

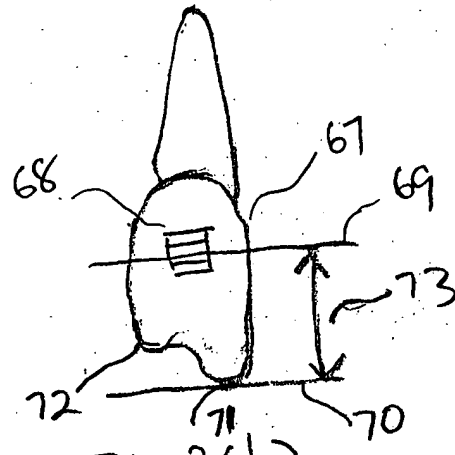


Fig. 2(b)

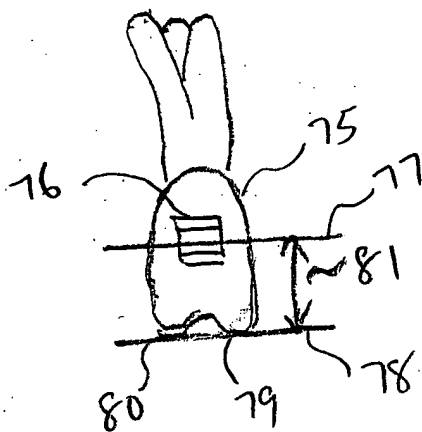


Fig. 2(c)

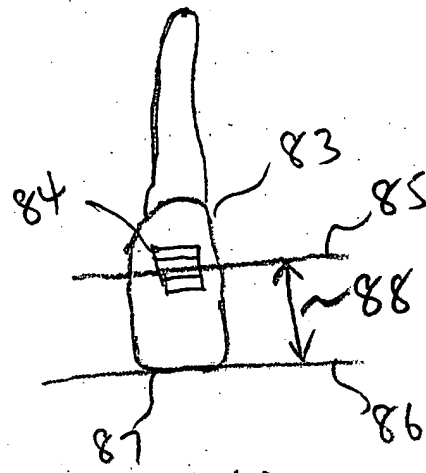


Fig. 2(d)

S/N: TBD

Applicant: Rohit Sachdeva et al.

"Bracket Placement and Evaluation"

Sheet 4 of 21

Suresmile 4.1 - [HOFFMAN-Bracket, Hamah, 1990 February 22, HOFF0001]

File Edit View Admin Tools Help

Regent Information: ☐ Scan ☐ Digital Impression

Case Management: ☐ Digital Treatment Planning

☐ Not Yet Ordered
☐ Setups
☒ In Production
☐ Needs Review
☐ Canceled

File: 12003/10/21/0932 AM

By Status: By Type: By Date:

Treatment Strategy*

Midline and Esthetic Occlusal Plane*

Occlusal Plane and A-P Positions*

Axial Reference Teeth*

Tooth Meso-Distal Axis

Alignment 2D - 3D

Mandible Space Management

Maxilla Space Management

Space Management (Mandible and Maxilla)

Space Management Summary*

Order Information

(* is required)

Remove: Order:

Display Brackets

Reference Model Initial #1

Occlusal Plane

Mandible Space Management

Canara Navigation

Parameter	Vertical Positions	A-P Positions	Text actions/striping	Displacements	Brackets
48	Ormico Molar Single 2nd Molar				Ormico Molar Single 2nd Molar
47	Ormico Molar Single 2nd Molar				Ormico Molar Single 2nd Molar
46	Ormico Molar Double 1st Molar				Ormico Molar Double 1st Molar
45	Ormico Mandibular twin g/o hook 2nd Molar				Ormico Mandibular twin g/o hook 2nd Molar
44	Ormico Mandibular twin hook 1st Bitruspid				Ormico Mandibular twin hook 1st Bitruspid
43	Ormico Mandibular twin hook cuspid				Ormico Mandibular twin hook cuspid
42	Ormico Mandibular twin Anterior				Ormico Mandibular twin Anterior
41	Ormico Mandibular twin Anterior				Ormico Mandibular twin Anterior

Arch Length Discrepancy

Right: -0.6 mm -2.3 mm

Left: -0.6 mm -2.3 mm

Mandible

Orametric Active Real Order in Work

Fig 3

S/N: TBD

Applicant: Rohit Sachdeva et al.

"Bracket Placement and Evaluation"

Sheet 5 of 21

SureSmile 4.1 - [HOFFMAN-Bracket, Hannah, 1990 February 22, HOFF0001]

File Edit View Admin Tools Help

Patient Information Case Management Data Treatment Planning

Not Yet Ordered
☐ Not Yet Ordered
☒ Setup
☒ In Production
☐ Needs Review
☐ Finished
☐ Canceled

Feb 11 2003 10:12:03 AM

Status Bracket Edit Date

Treatment Strategy*
 Midline and Esthetic Occlusal Plane*
 Occlusal Plane and A-P Positions*
 Axial Reference Teeth*
 Tooth Mesio-Distal Axis
 Alignment 2D - 3D

Mandible Space Management
 Maxilla Space Management
 Space Management (Mandible and Maxilla)
 Space Management Summary*
 Order Information

(* is required)

Remove Order

Reference Model Initial #1

Camera Navigation

Bracket Navigation Plane

Mandible Space Management

Parameter Vertical Positions A-P Positions Extractions/Stripping Displacements Brackets

48	Ormco Molar Single 2nd Molar	38	Ormco Molar Single 2nd Molar
47	Ormco Molar Single 2nd Molar	37	Ormco Molar Single 2nd Molar
46	Ormco Molar Double 1st Molar	36	Ormco Molar Double 1st Molar
45	Ormco Mandibular Twin Hook 2nd Braces	35	Ormco Mandibular Twin Hook 2nd Braces
44	Ormco Mandibular Twin Hook 1st Braces	34	Ormco Mandibular Twin Hook 1st Braces
43	Ormco Mandibular Twin Hook 1st Braces	33	Ormco Mandibular Twin Hook 1st Braces
42	Ormco Mandibular Twin Anterior	32	Ormco Mandibular Twin Anterior
41	Ormco Mandibular Twin Anterior	31	Ormco Mandibular Twin Anterior

Arch Length Discrepancy
 Right 0.6mm
 Left 2.3mm
 Mandible

Fig. 4

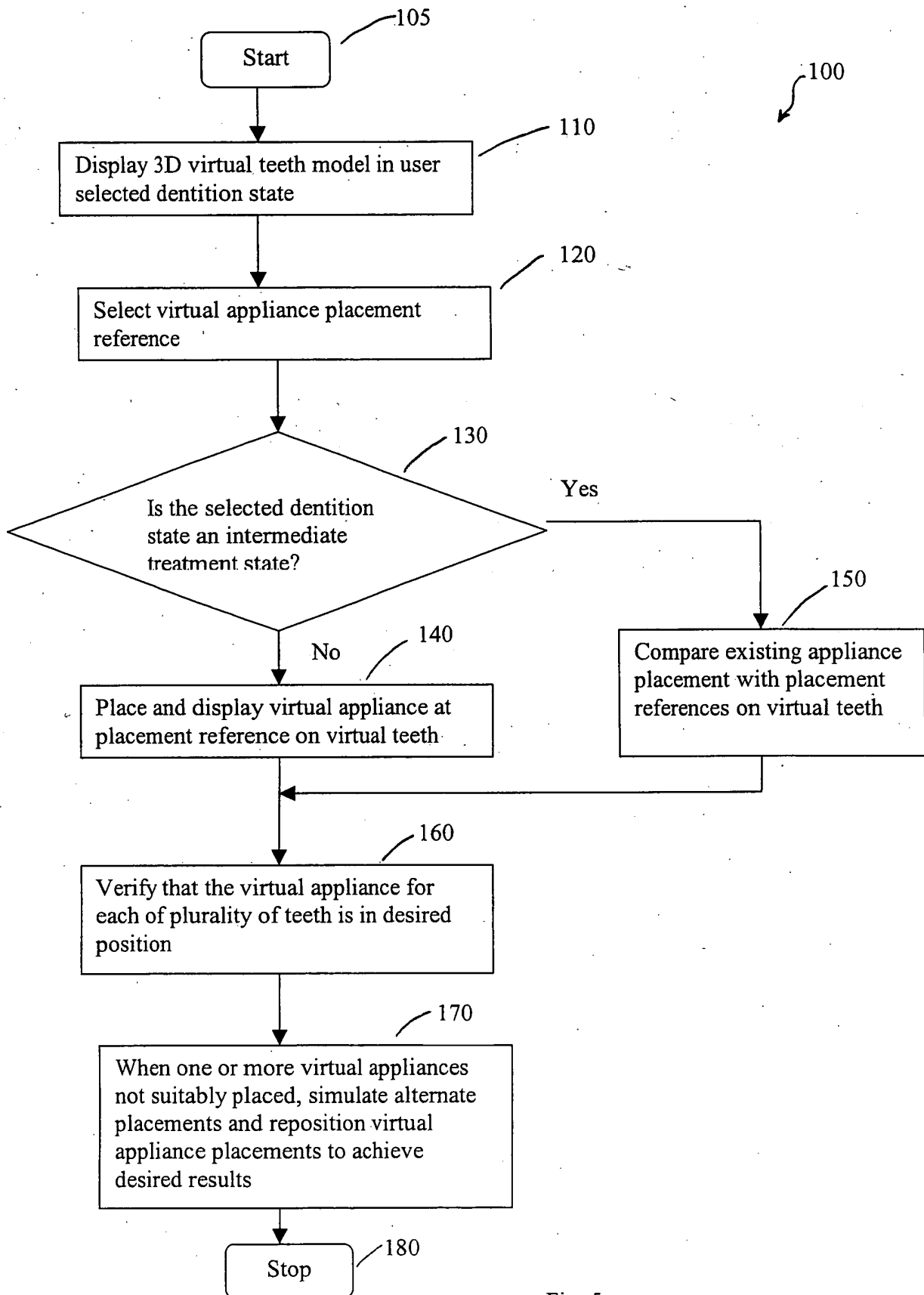


Fig. 5

S/N: TBD

Applicant: Rohit Sachdeva et al.

"Bracket Placement and Evaluation"

Sheet 7 of 21

Suresmile 4.1 - [Hoffman-Bracket, Hannah, 1990 February 22, H0F0001]
 File Edit View Admin Help
 Patient Information Case Management Digital Impression Digital Treatment Planning
 Not Yet Ordered
 Setups Plan: 2003/10/21 08:42 AM
 In Production
 Needs Review
 Finished
 Canceled
 Treatment Strategy*
 Midline and Esthetic Occlusal Plane*
 Occlusal Plane and A-P Positions*
 Axial Reference Teeth*
 Tooth Mesio-Distal Axis
 Alignment 2D - 3D
 Mandible Space Management
 Maxilla Space Management
 Space Management (Mandible and Maxilla)
 Space Management Summary*
 Order Information
 (* is required)
 Remove Order
 Reference Model Initial #1
 Camera Navigation
 Bracket Navigation Plane
 200
 Align to: Vertical Positions A-P Positions Extractions/Stripping Displacements Brackets
 Malocclusion: Labial Incisors
 Maxilla: Soft Tissue
 Mandible: Soft Tissue
 Molar Distance: 39.0 (reference: 39.0) mm
 Molar Distance: 37.1 (reference: 37.0) mm
 Overlap: 3.8 mm
 Overlap: 3.6 mm
 Arch Depth: Right: 42.5 (reference: 40.6) mm
 Arch Depth: Left: 40.2 mm - 40.2 mm
 Arch Length Discrepancy: Right: 0.2 mm - 0.2 mm
 Arch Length Discrepancy: Left: 0.2 mm - 0.2 mm
 Natural
 Order

Fig. 6

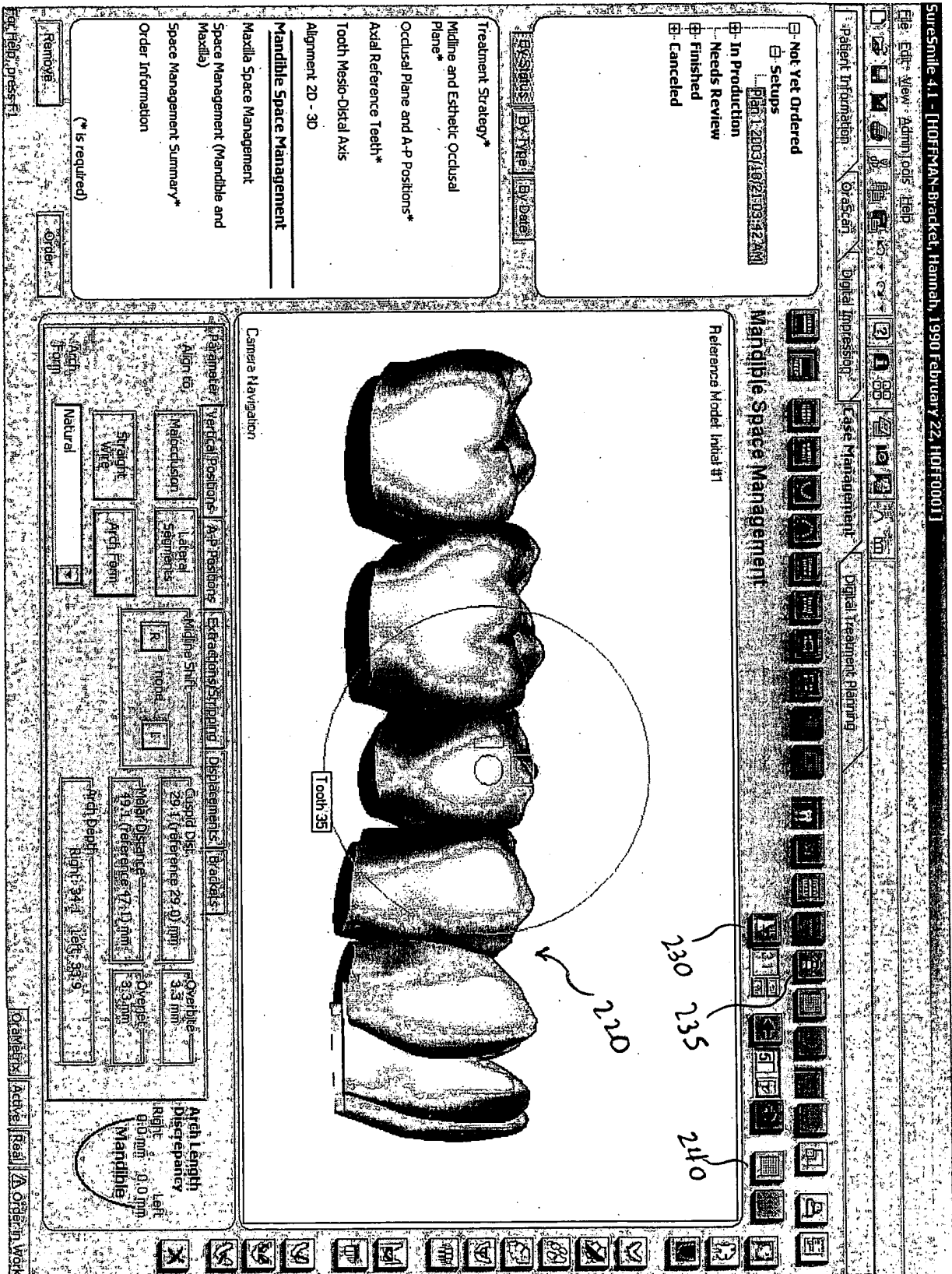


Fig. 7

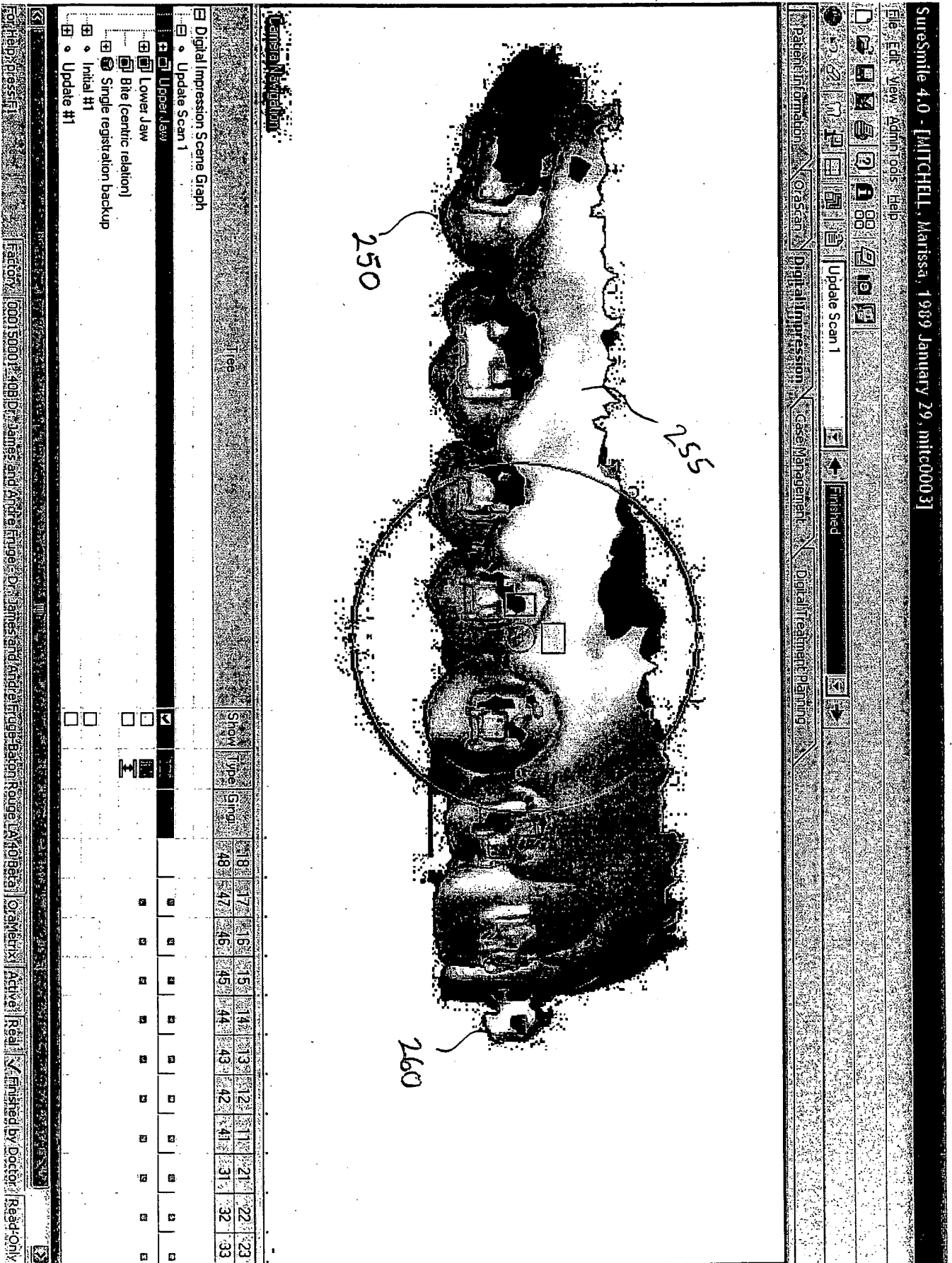


Fig. 8A

SureSmile 4.0 - [MITCHELL, Marissa, 1989 January 29, mtcq003]

File Edit View Admin Tools Help



Update Scan 1

Finished

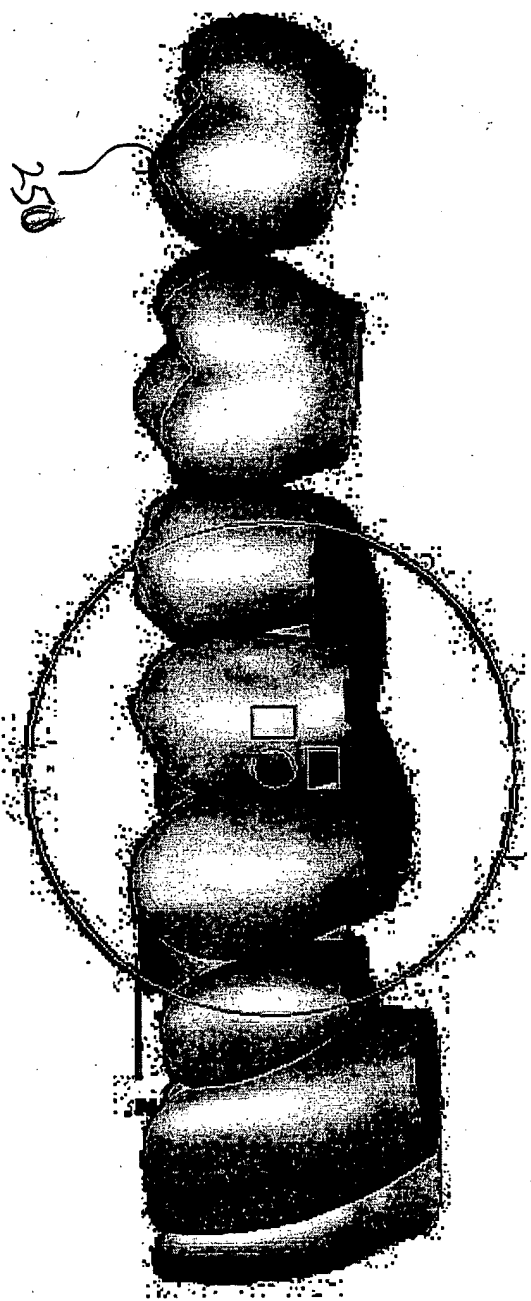
Patient Information

Oral Scan

Digital Impression

Case Management

Digital Treatment Planning



Digital Impression

Digital Impression Scene Graph

Update Scan 1

Update #1

Initial #1

Update #1

Lower Jaw

Bite (centric relation)

Single registration backup

Initial #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Update #1

Fig. 8B

S/N: TBD

Applicant: Rohit Sachdeva et al.

"Bracket Placement and Evaluation"

Sheet 11 of 21

Suresmile 4.0 - [MITCHELL, Marissa, 1909 January 29, mtc0003]

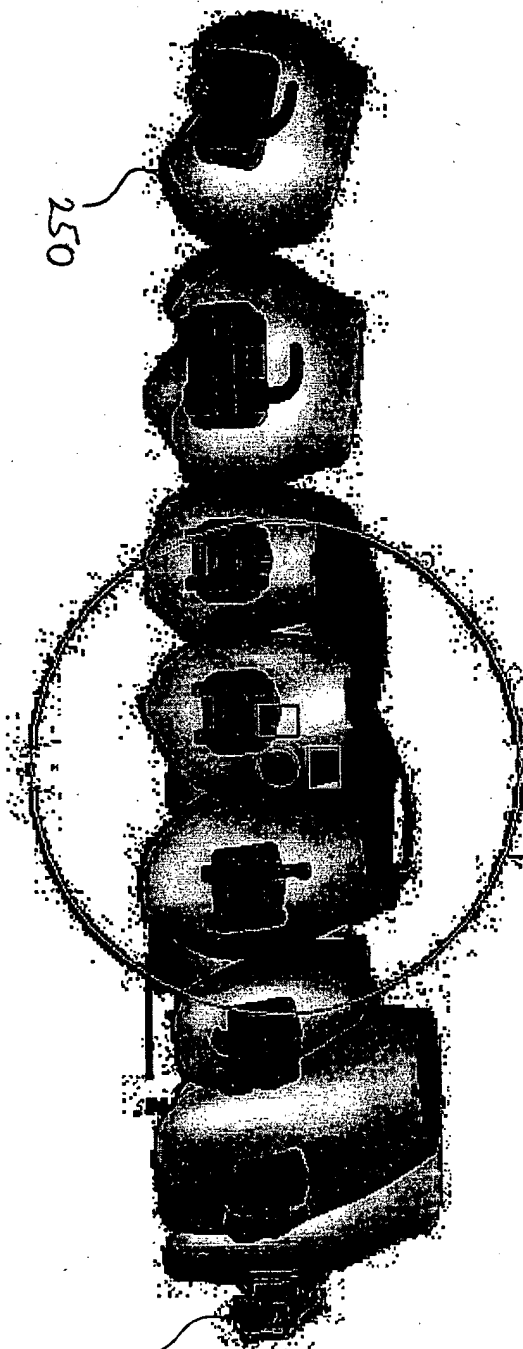
File Edit View Admin Tools Help



Update Scan 1

Finished

Patient Information | Oralscan | Digital Impression | Case Management | Digital Treatment Planning



Sample Navigation

Digital Impression Scene Graph

Update Scan 1

Update Scan 1

Lower Jaw

Bite (centric relation)

Single registration backup

Initial #1

Update #1

Free	18	17	16	15	14	13	12	11	21	22	23
Shw	48	47	46	45	44	43	42	41	31	32	33

Factory: 0001500016408.Dr James and Andre Fuge, Dr James and Andre Fuge Baton Rouge, LA 70801 | Oralmatrix Active | Read | Finished by Doctor | Read Only

Fig 8C

S/N: TBD

Applicant: Rohit Sachdeva et al.

"Bracket Placement and Evaluation"

Sheet 12 of 21

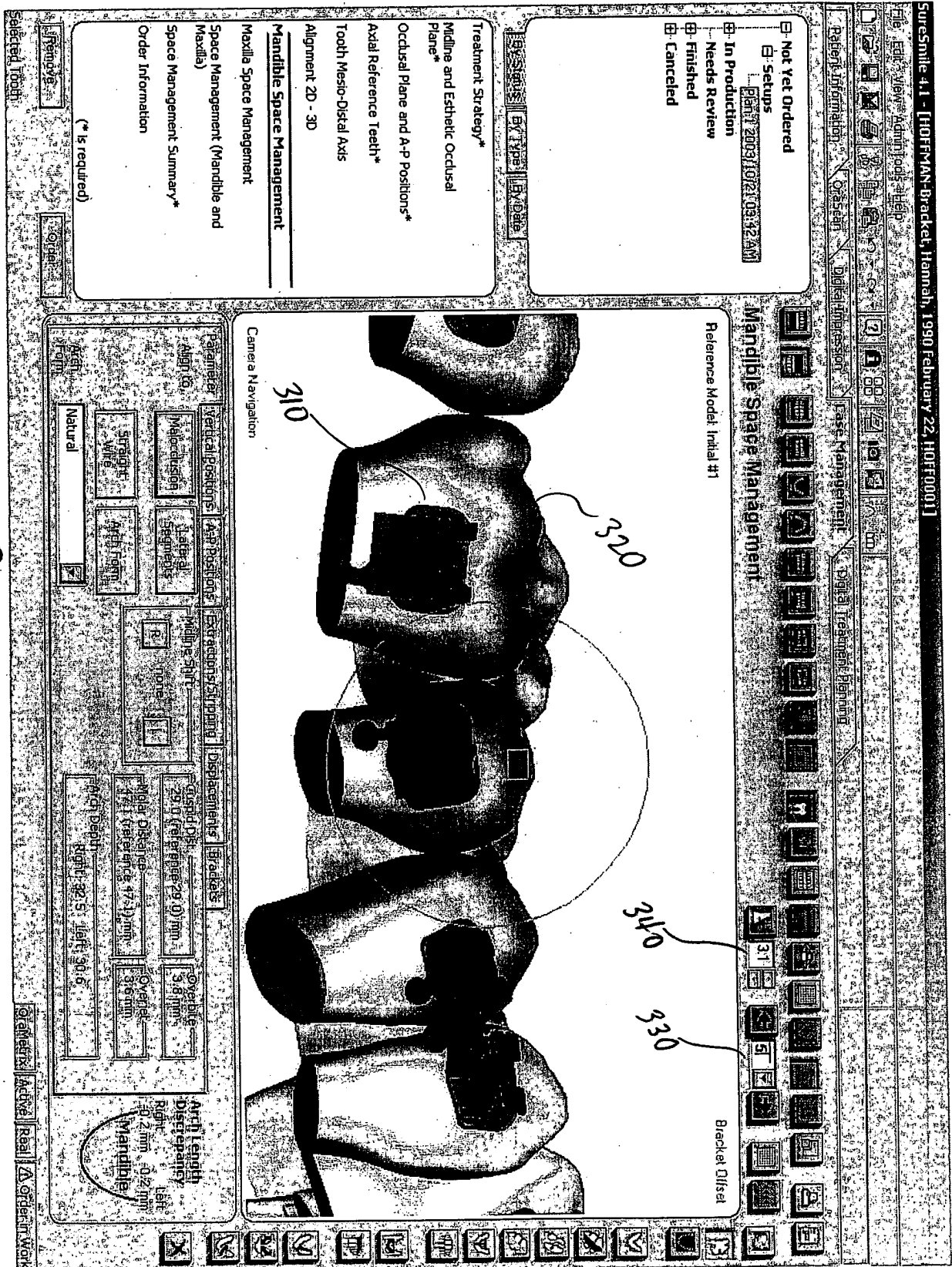
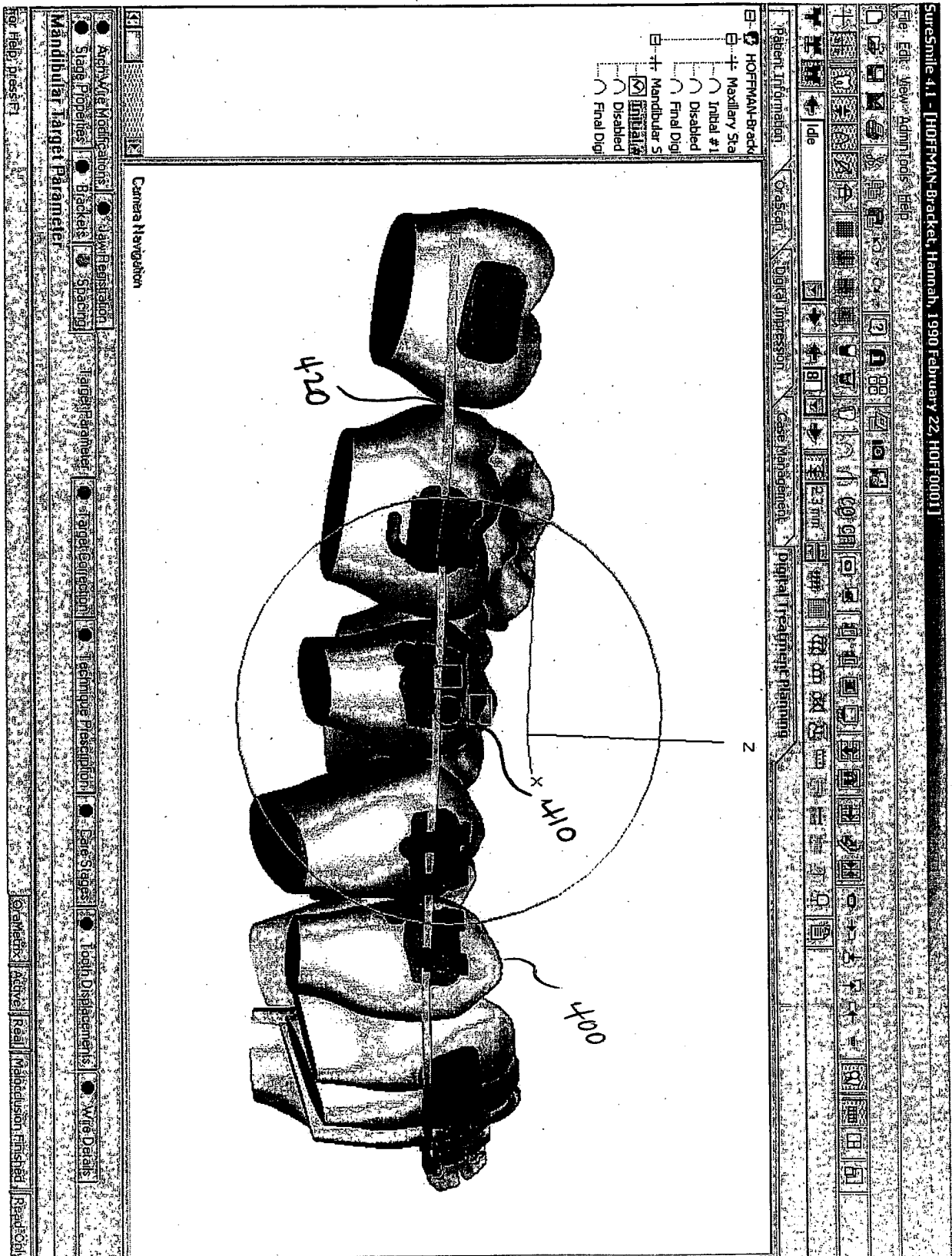


Fig. 9



S/N: TBD

Applicant: Rohit Sachdeva et al.

"Bracket Placement and Evaluation"

Sheet 14 of 21

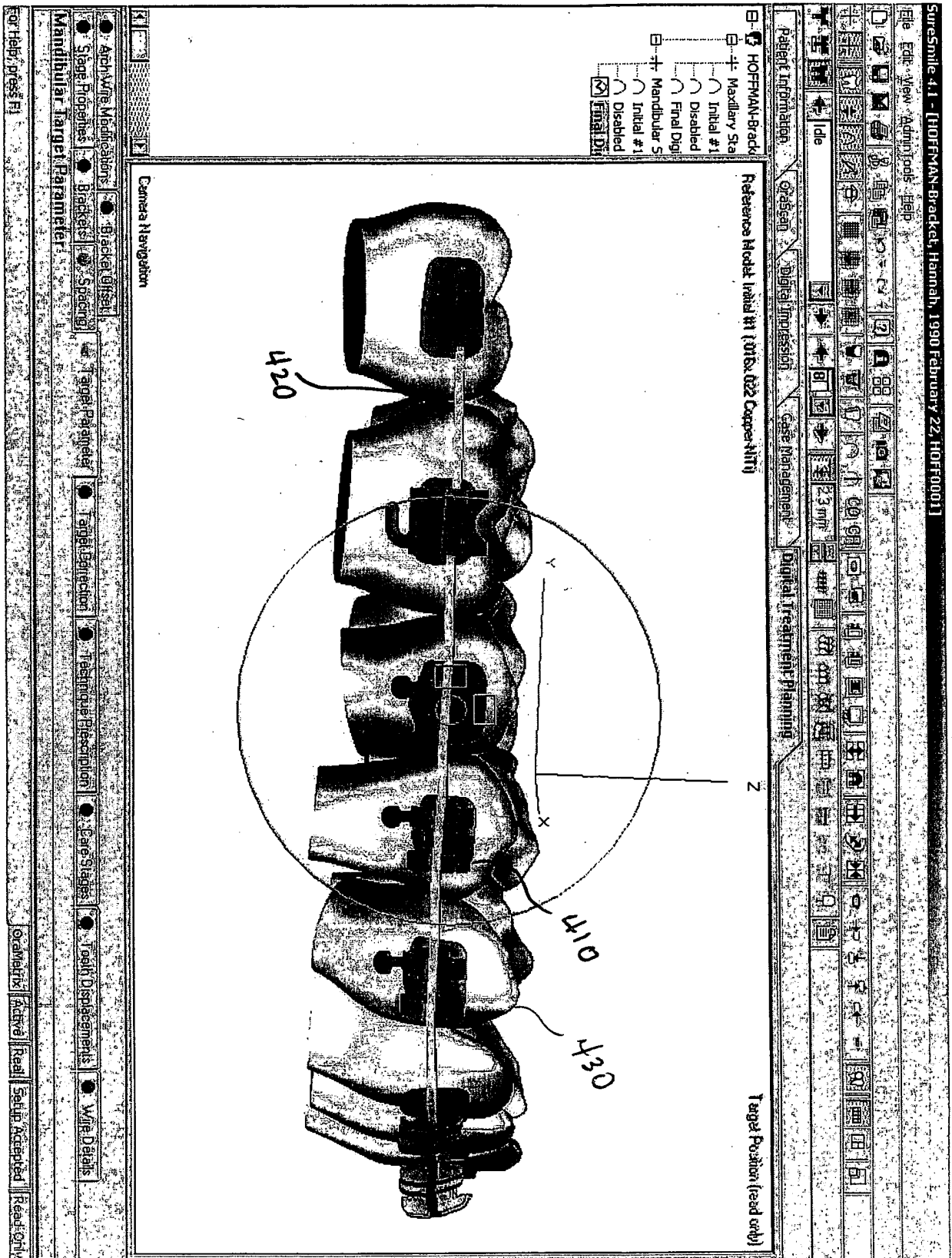


Fig 11

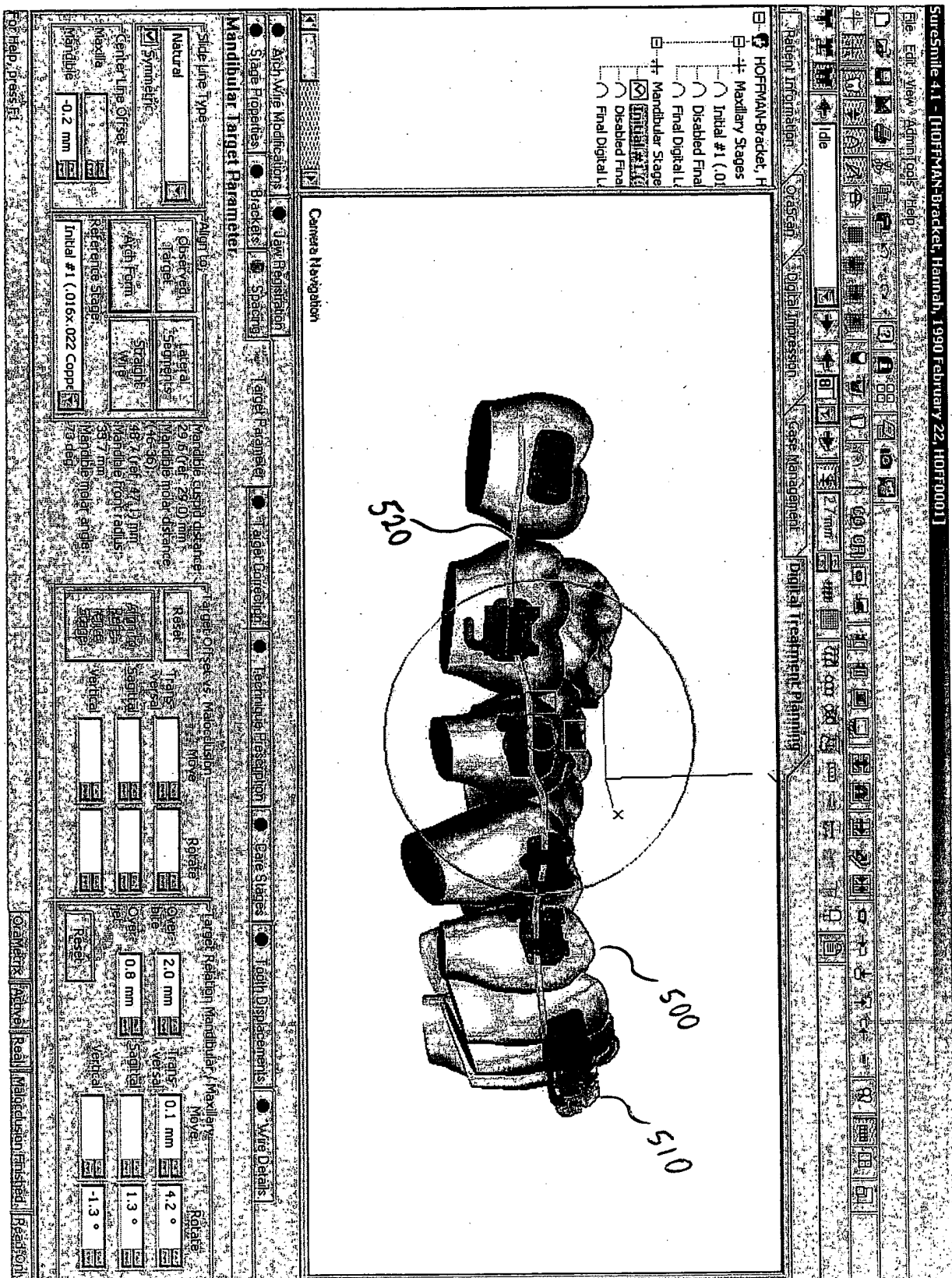


Fig. 1

Sureshni 4.1 - [HOFMAN-Bracket, Hamah, 1990 February 22, HOF0001]

File Edit View Admin Tools Help

Patient Information: ☒ HOFMAN-Bracket, H ☐ Maxillary Stages ☐ Initial #1 (.01) ☐ Disabled Final ☐ Final Digital L ☐ Mandibular Stage ☐ Initial #1 (.01) ☐ Disabled Final ☒ Final Digital

Reference Model Initial #1 (.01x.022 Copper NIT) Target Position (read only)

Camera Navigation

Mandibular Target Parameter

Slide Line Type: ☒ Natural ☐ Symmetric

Center Line Offset: mm

Maxilla: mm

Mandible: mm

Align to: ☐ Observed Target ☐ Lateral Segments ☐ Arch Form Wire ☐ Reference Stage: Initial #1 (.01x.022 Copper NIT)

Mandible quad distance: 29.5 (ref: 29.0) mm

Mandible major distance: 46.8 (ref: 47.1) mm

Mandible minor distance: 39.7 mm

Mandible major angle: 73 deg

Target Offset vs. Midline Shift

Reset

Transverse: mm

Sagittal: mm

Vertical: mm

Rotate: deg

Target Relation Mandibular/Maxillary

Overbite: 2.0 mm

Overjet: 0.8 mm

Vertical: mm

Rotate: 4.2°

Vertical: 1.3°

Vertical: -1.3°

For Help, press F1

OrthoMetric Active Real Setup Accepted Read Only

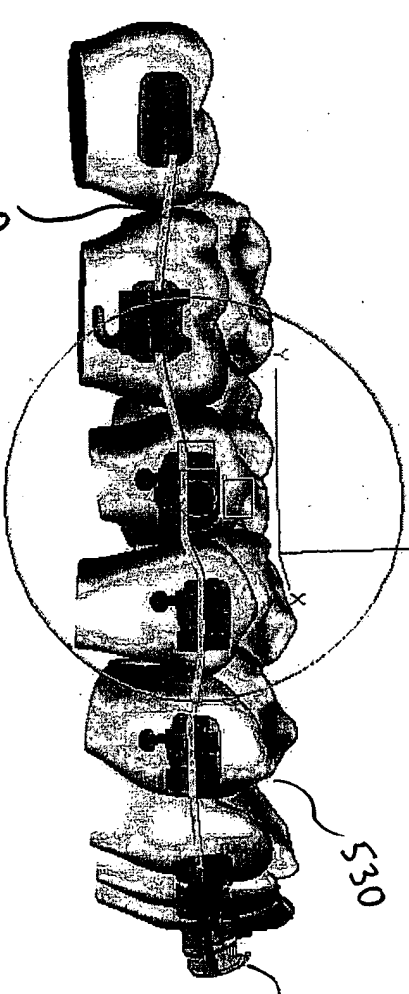


Fig. 13

S/N: TBD

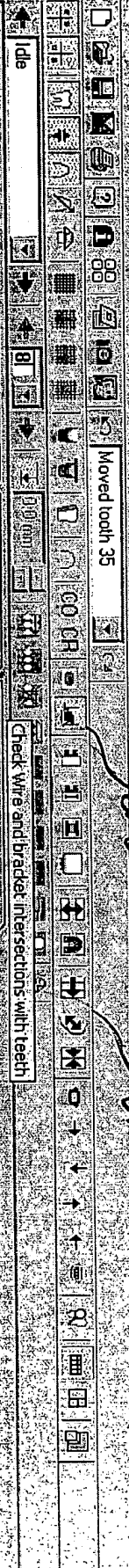
Applicant: Rohit Sachdeva et al.

"Bracket Placement and Evaluation"

Sheet 17 of 21

SureSmile 4.0 - [Wallen, Linda, 1973 January 22, wall0001]

File Edit View Admin Tools Help



Patient Information

Orscan

Digital Impression

Case Management

Digital Treatment Planning

Check wire and bracket intersections with teeth

Wallen, Linda

Maxillary Stages

Initial #1

Disabled Final 111 Original

Disabled Final Copy of 111

Disabled Final 111 REV 2 W

Disabled Final 111 REV 2 W

Final 111 REV 2 (016x.02)

Mandibular Stages

Initial #1

Disabled Final 111 Original

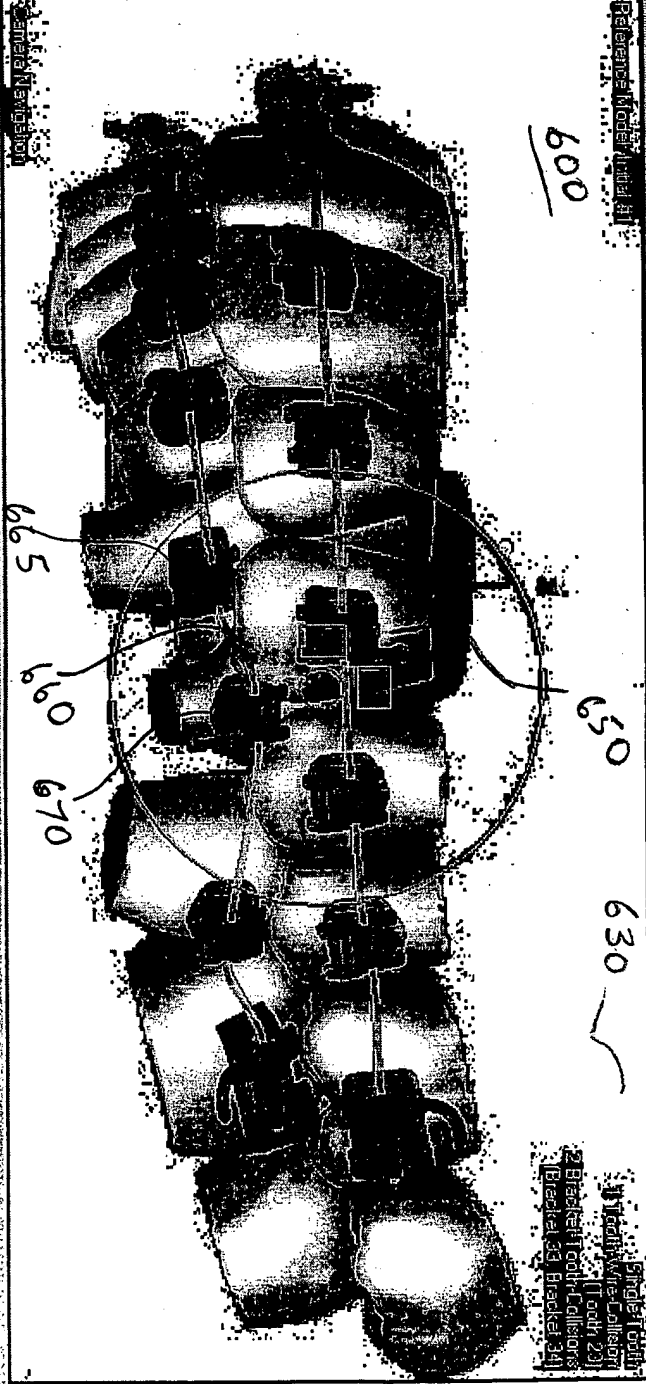
Disabled Final Copy of 111

Disabled Final 111 REV 2 W

Disabled Final 111 REV 2 W

Final 111 REV 2 (016x.02)

Current Position

Single Tooth
Tooth Wire Collision
Tooth 23
Bracket 33, Bracket 34

- Stages Properties
- Brackets
- Bracket Offset
- Spacing
- Target Parameter
- Target Correction
- Technique Prescription
- Cape Stages
- Tooth Displacements
- Wire Details
- Arch Wire Modifications

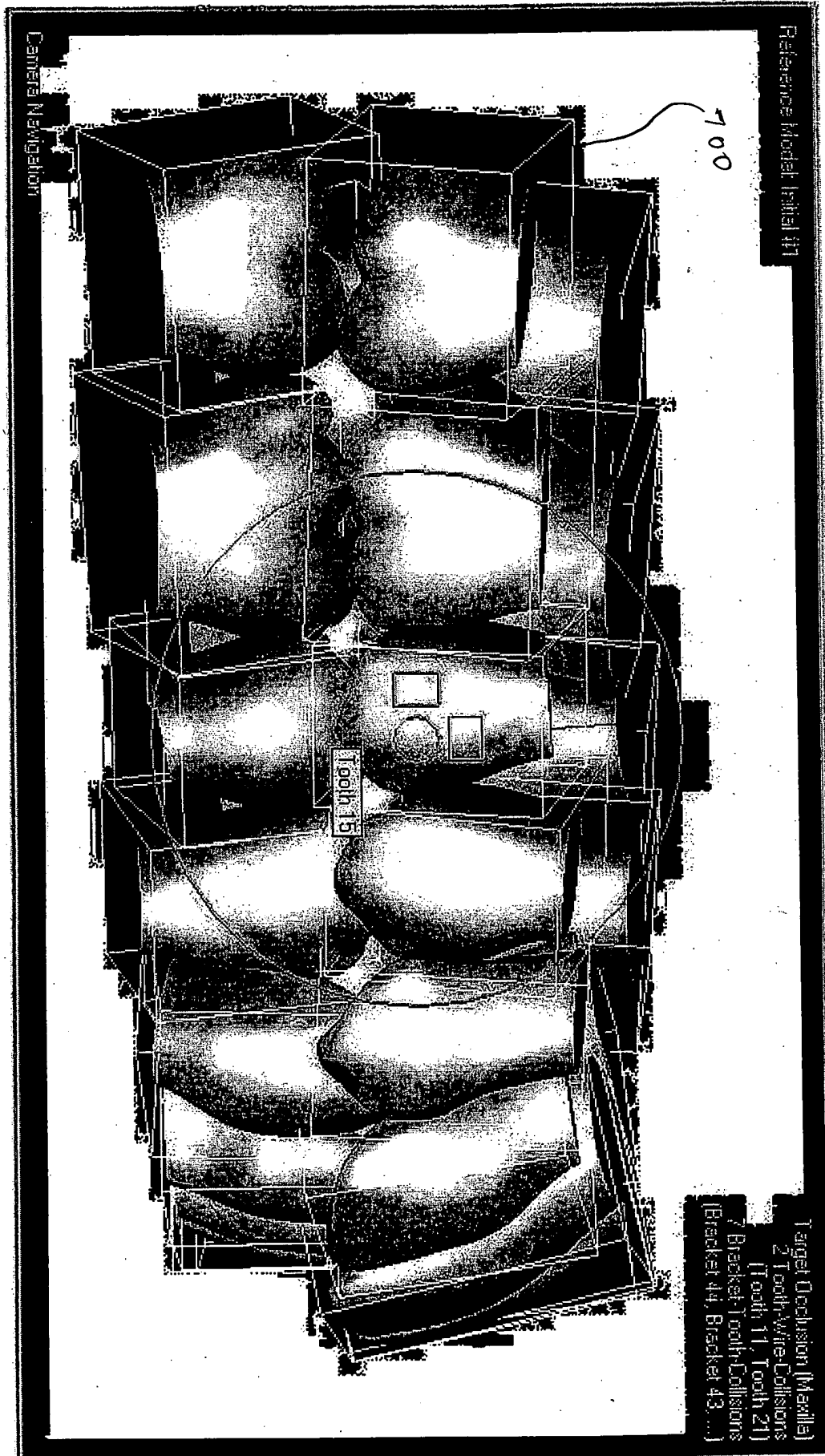
Wire Details	46	45	44	43	42	41	31	32	33	34	35	36	Status
d	m	d	m	d	m	d	m	d	m	d	m	d	
Slide Increment	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4
Slide Overwrite													
Slide	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4
Slide Reduce													

Check wire and bracket intersections with teeth

Factory 000150001 408 DP James and Andre Fringe ID James and Andre Fringe Baton Rouge LA 40 Beta Orametric Active! Real Setup Finished

Fig. 14

Fig. 15



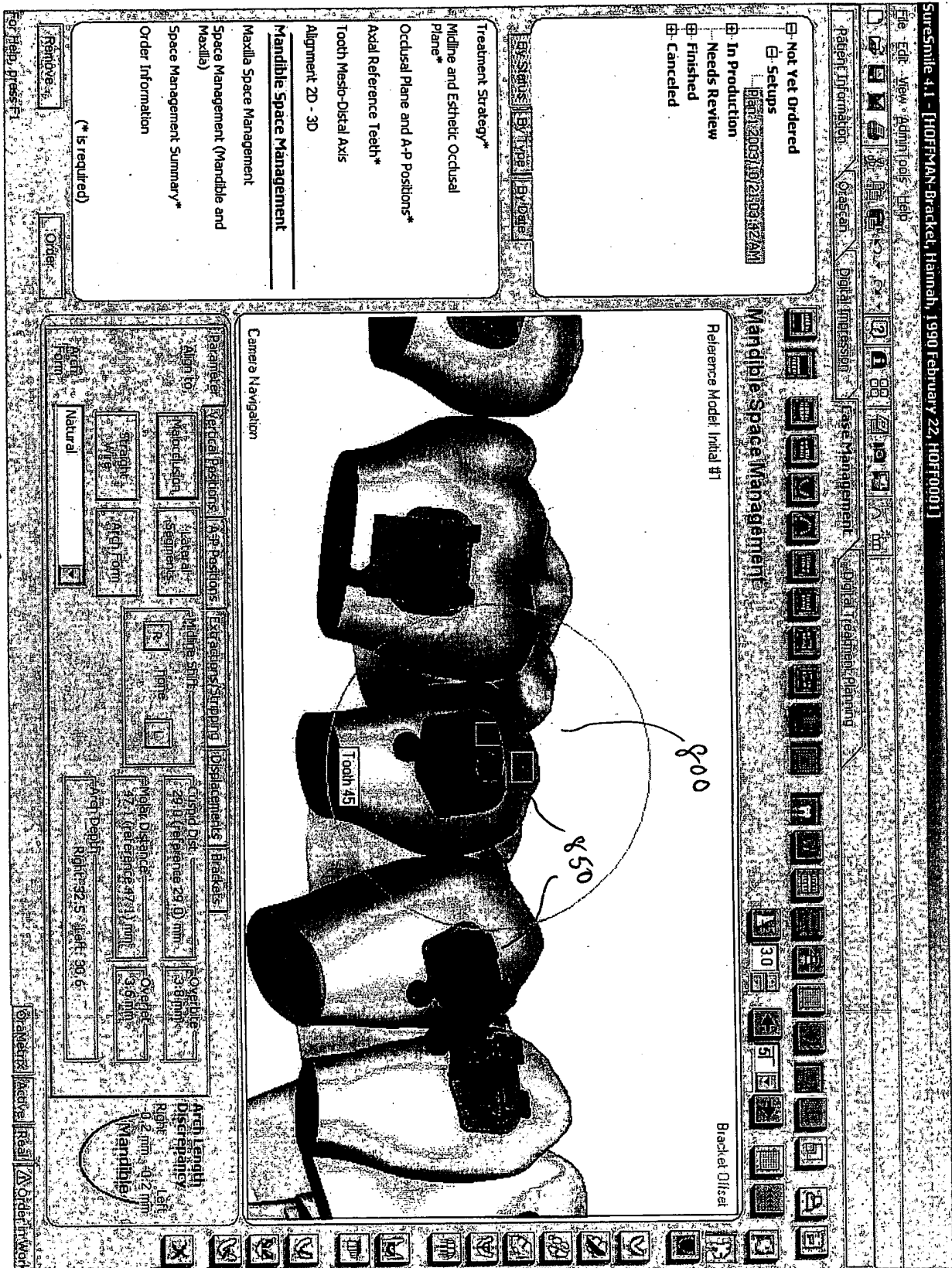


Fig. 16

The image is a screenshot of the HOFFMAN-Bracket software interface. At the top, a menu bar includes 'File', 'Edit', 'View', 'Administration', and 'Help'. Below this is a toolbar with various icons for file operations and viewing. The main window is divided into several panels. On the left, there's a 'Patient Information' panel with fields for 'Case Management', 'Digital Impression', and 'Digital Treatment Planning'. The central area displays a 3D model of a dental arch with brackets, labeled 'Reference Model Initial #1'. The model is annotated with 'q50' and 'q500'. To the right of the model is a 'Camera Navigation' panel. Below the model, there's a 'Mandible Space Management' section with a 'Mandible Space Management Summary*' and 'Order Information'. The bottom of the interface features a 'Parameters' panel with various settings like 'Align to', 'Vertical Positions', 'A-P Positions', 'Extractions/Stripping', 'Displacements', 'Brackets', 'Mandible Shift', 'Overbite', 'Overjet', 'Arch Length Discrepancy', and 'Mandible'. The status bar at the very bottom shows 'Parameters Active', 'Real', and 'Order in Work'.

Fig. 17

S/N: TBD

Applicant: Rohit Sachdeva et al.

"Bracket Placement and Evaluation"

Sheet 21 of 21

SureSmile 4.0 - [MITCHELL, Marissa, 1989 January 29, mitch00031]

File Edit View Admin Tools Help

Maxilla wire on/off

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100

100